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Identity Development Processes in Emerging Adulthood: Accounting for Variations in Educational Context

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MASTER'S THESIS

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Becky Wood

November 4, 2015

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A Thesis

Presented to

The Faculty of

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In Partial Fulfillment

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Abstract

Past research of emerging adults has yet to investigate the individual experiences and processes of identity development in emerging adults who are in the workforce or currently unemployed (Hendry & Kloep, 2007), predominately focusing on emerging adults attending universities. The current study expands the study of identity development in emerging adulthood to include varied educational contexts. The current study compared normative college students, first generation college students, technical college students and those who have never attended college, to evaluate potential group differences in identity exploration and the relationship between identity exploration and psychological adjustment. Emerging adults in college contexts engaged in more complex identity processing than those who never attended college. However, identity achievement was associated with positive outcomes in all groups. Further, it appears that the contexts under which identity processing occur may vary, though this remains a question for future research.

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Identity Development Processes in Emerging Adulthood:

Accounting for Variations in Educational Context

Identity development has traditionally been viewed as the prominent task of adolescence, but more recent research suggests it is a task primarily managed in emerging adulthood (Beyers & Seiffge-Krenke, 2010; Syed & Amizitia, 2010). Although research on identity development in emerging adulthood is becoming increasingly common, researchers have primarily investigated this process in college students both in the United States (e.g. Arnett, 1997; Arnett, 1998) and other industrialized countries (cf., Plug, Zeijil & du Bois-Reymond, 2003). The limited research comparing college students and college-aged non-students has shown that those who go to college are more likely to explore and commit to identities than individuals who do not attend college (Arnett, 1997). However, little is known about the individual experiences and processes of identity development in emerging adults who are in the workforce or currently unemployed (Hendry & Kloep, 2007). Theoretically, all emerging adults face the same challenges: transitioning from an adolescent to an adult, establishing a family, and selecting an occupation (Arnett, 2006). Further, successful management of relevant developmental tasks is associated with positive adjustment (Erikson, 1968; Kroger, Martinussen, & Marcia, 2010; Shwartz, 2007). The current study compares identity exploration processes in emerging adults in college (normative and first generation) and emerging adults in the community who are not (and have not) attended college. Specifically, I examined similarities or differences across groups in identity development processes, the particular experiences that facilitate identity exploration processes, and the kinds of identity processes associated with positive psychological outcomes.

Arnett's theory of emerging adulthood describes people roughly between the ages of 18 to 29 years of age who experience prolonged identity exploration and are marked by a feeling of being "in-between" adolescence and adulthood. Recent changes in industrialized societies have facilitated the emergence of this new developmental period, as well as the new experiences available to this population that may facilitate identity work (Arnett, 1998). For example, economic changes in the last half century have created opportunities for the larger majority to pursue higher education for extended periods of time, and emerging adults move frequently in pursuit of education, career opportunities, or for travel. Changes in living situations also represent a unique experience for emerging adults, such as freedom from parental supervision and cohabitation with friends and romantic partners. Further, the median age of marriage and childbirth has increased from the early twenties to the late twenties in the last half-century (Arnett, 2006), enabling a greater period of identity exploration prior to the commitments of adulthood. These societal changes have not only created a new developmental period, but these characteristic experiences of emerging adults also create opportunities for identity exploration.

Identity Development in Emerging Adulthood: Two Approaches

Identity development is considered the prominent task of adolescence and young adulthood (Erikson, 1968). The higher order cognitive functioning that allows for abstract thoughts, in conjunction with increased social experiences, contributes to the opportunities to engage in identity exploration. There are two contemporary approaches to identity development, both rooted in Erikson's theory, but with largely different ways of conceptualizing and assessing identity development (McLean, Syed, Yoder, & Greenhoot, 2014): the status and narrative approaches. Both approaches are based on the general idea

that the healthy pathway is for people to engage in some kind of personal exploration of their identities, and then commit to or solidify those identities.

The Identity Status Approach

The identity status approach is based on Erikson's (1968) conceptualization of identity development as coherence and consistency versus identity confusion. Based on this theory, Marcia (1966) outlined the processes through which individuals pass to reach identity achievement, a marker of this coherence and consistency. Marcia (1966) proposed two dimensions of identity development: exploration and commitment. An individual could either be exploring, or not, or be committed, or not, thus creating a four category model. When individuals have neither explored nor made a commitment, they are in identity diffusion. When individuals have not engaged in exploration but have made a commitment, they are in identity foreclosure. When individuals have engaged in exploration but have not committed, they are said to be in moratorium. When individuals have engaged in exploration and have also made a commitment, they are said to be identity achieved.

The theory of identity status development (Kroger, et al., 2010) centers on the idea that, for Western cultures, identity achievement is the ideal end-point of the identity development process due to its association with psychological adjustment (Schwartz, 2007), and this status begins to be seen in adolescence, and is increasingly common with age. Meta analytic results lend support to the stage theory of identity development, as moratorium increases through adolescence and then begins to decline in emerging adulthood (Kroger et al, 2010). However, this same meta-analysis indicated that roughly half of the adults in the samples had not yet reached identity achievement by the end of emerging adulthood. This

suggests that emerging adulthood is still an active period for the consolidation and commitment to identities.

The Narrative Identity Approach

In the transition to adulthood, emerging adults must negotiate multiple roles, experiences, and transitions. To incorporate new experiences into their identity, emerging adults may engage in reflection upon these experiences, which is the focus of narrative approaches to identity development (McLean, 2008a). From this narrative perspective, identity is viewed as a selective and subjective story of past experiences that represents an individual's personal understanding of themselves (McAdams, 1993; McLean, 2008a). One mechanism of narrative identity development is *autobiographical reasoning* (Habermas & Bluck, 2000). Autobiographical reasoning is defined as engaging with the personal past by reflecting on how past experiences connect to one's current understanding of self (see also Park, 2010).

Meaning-making. This approach to autobiographical reasoning examines the degree to which an individual reports learning something about the self in reflecting on past experiences. McLean and Thorne (2003) captured this type of reasoning through their examination of lessons and insights in emerging adults' self-defining memory narratives. Lessons are indications that individuals have learned something about themselves that was specific to the kind of event experienced (e.g., "I learned that driving drunk is dangerous."). Insights are indications of broader meaning about the self or the world generalizing beyond the specific event (e.g., "I learned the value of human life."). McLean and colleaugues have found that such instances of meaning are associated with age related changes across adolescence (McLean, Breen, & Fournier, 2010), are more likely to occur in conflictual or

negative events (McLean & Thorne, 2003; Thorne, McLean, and Lawrence, 2004), and are more likely to occur in memories shared to explain oneself to others as opposed to memories told for other reasons, such as entertainment (McLean, 2005). These results suggest that meaning-making may reflect heightened identity work.

However, meaning-making may be context dependent. That is, the type of event may matter in terms of whether or not individuals draw meaning from it. Thorne et al. (2004) found that meaning was most likely to occur in mortality or relationship memories, and least likely in recreational memories. These findings add to the growing body of research suggesting that meaning is most likely derived from events that are difficult or challenging, (e.g. Dumas, Lawford, Tieu, & Pratt, 2009; McLean, 2005; McLean, 2008a; McLean, 2008b; McLean & Breen, 2009; McLean & Thorne, 2003; Thorne et al., 2004). Further, memories about mortality and relationship experiences may be important topics for identity work, and they represent experiences that both college and non-college emerging adults presumably have.

Given the many transitions and novel experiences with which emerging adults are faced, there are potentially a variety of experiences that facilitate the exploration and the development of identity through the process of autobiographical reasoning. Emerging adults explore the domains of love, work, and worldviews with the direct intent of identity exploration (Arnett, 2000). Emerging adults, both in college and the workforce, may have equal opportunities to explore relationships and various jobs. With regard to worldviews, college may have the potential to create unique experiences geared towards examining personal beliefs (Pascarella & Terenzini, 1991). However, research with emerging adults not in college found them to be just as likely to explore beliefs (Arnett, 1997). Yet another study

found that exploration of religious beliefs during emerging adulthood occurred independent of educational background (Arnett, 2000). Therefore, there is some evidence to suggest that identity processes may occur independently from the college experience in emerging adulthood. However, it is unclear if each type of context facilitates the same depth of identity exploration for different groups, and how exploration is related to positive adjustment across different contexts.

Although there is little research empirically evaluating the outcomes of identity processes across contexts, current research suggests that meaning-making is generally associated with positive outcomes (cf., McLean & Mansfield, 2011). For example, many researchers have shown that autobiographical reasoning processes are positively associated with well being and increased maturity, even though meaning is more likely to occur in the context of negative or conflicting experiences, (Pals, 2006; see Pasupathi, Mansour, & Brubaker, 2007 for a review). Thus, the transitions and challenges emerging adults face create a variety of opportunities for identity exploration, and potentially positive outcomes for engagement in developmental processes.

Present Study

The goal of the present study was to expand research regarding identity development in emerging adults to include emerging adults both in and outside of the college context. Specifically, the goal was to evaluate the level to which each group was engaged in identity processes – from both narrative and status perspectives - the contexts through which identity processes are best facilitated for each group, and if the pattern of association between identity processes and psychological adjustment is similar or different for each group. Adjustment was assessed via depression and life satisfaction measures.

Finally, as this study examined groups of emerging adults from varying educational backgrounds, social class is an important confound to recognize. Research on identity development in emerging adulthood is largely dominated by university students, many of whom are middle or upper class, as access to colleges and universities can vary based on social class status (Archer, Hutchings & Ross, 2003). Even for those who attend college, Aries and Sieder (2007) found that most students chose careers in line with their social class status. Additionally, first generation college students' success at college (knowledge about college processes, cost of attendance, social support) is also influenced by social class status (Pascarella, Pierson, Wolniak, & Terenzini, 2004). Most central to the present study, recent research shows that social class may impact the degree to which one is able to reason successfully about the past, given the greater number of negative and stressful experiences that those at lower socioeconomic status experience (Pals-Lilgendahl & McAdams, 2011). The present sample includes emerging adults in the community who are not in college, first generation college students, normative students, and technical college students, all of whom vary in social class background. Although this design allows me to consider the context of education in relation to identity development, the design comes with the confound of social class.

Three hypotheses were proposed. First, identity processes are predicted to occur in higher frequencies in the college groups compared to the community sample. Although there is some evidence to suggest that identity processes may occur independently from the college experience in emerging adulthood, it is unclear if each type of experience facilitates the same *depth* of identity exploration for different groups. Although there is relatively little research on non-college emerging adults, based on the research of Pals-Lilgendahl and McAdams

(2011) with mid-life adults, I expect the community group to have lower rates of identity exploration than the other groups.

However, when examining the kinds of events reported, I expect to see more nuance. My second hypothesis is that within narratives about achievement, identity processes will be more prevalent in the college emerging adult groups compared to the community group, with equivalent identity processing in narratives about relationships.

My third hypothesis is that depth of identity processes are predicted to correlate with higher rates of life satisfaction and lower rates of depression within the college samples, corresponding to the normative expectations of identity achievement within the context of college and consistent with prior research. No hypothesis about the relationship between identity processes and psychological adjustment in the community sample is proposed as there has been little prior research investigating the relationship thus far.

Method

Participants

A total of 201 emerging adults (17-30 years old) participated in the current study, from four different groups: 71 Western Washington University (WWU) normative college students (NC) and 49 WWU first generation students (FG), 51 technical college (TC) students, and 30 participants from the community (never attended college) (COM). Demographic information is shown in Table 1. The proportion of female participants was comparable for each group ($X^2(3) = 2.20$, $p = .53$), where 44 females (62 %) participated from the NC sample, 36 females (74 %) were FG, 34 females (67 %) participated from the TC sample, and 18 females (60 %) participated in the COM sample. The reported ethnicity for participants was representative of the area, as shown in Table 1.

Measures

Inventory of the Dimensions of Emerging Adulthood (IDEA). The IDEA is a 31-item measure with six subscales corresponding to the most prominent features of emerging adulthood: identity exploration, exploration of possibilities, negativity or instability, other-focused, self-focused, and feeling "in-between" (Reifman, Arnett & Colwell, 2007). Each subscale represents the degree to which individuals identify with each theme that is characteristic to emerging adulthood. Higher total scores on the IDEA scale represent individuals who are presently in the stage of emerging adulthood. Examples include, "is this period of your life a time of many possibilities?", and "is this period of your life a time of separating from parents?" (see Appendix A for complete scale). Responses are rated on a 1-4 scale, with possible answers ranging from "strongly disagree" to "strongly agree." The IDEA scale was reliable for the current study (Cronbach's alpha = .95, range per group = .73 - .94; alpha range for the subscales overall = .79 - .89).

Erikson's Psychosocial Stage Inventory (EPSI). The EPSI is a 64 item measure with six subscales corresponding to Erikson's first six stages of development including trust, autonomy, initiative, industry, identity, and intimacy (Rosenthal, Gurney & Moore, 1981). Each subscale measures whether the participant has resolved the corresponding stage of development. Inability to resolve each stage of development has been suggested to create developmental crises across the lifespan. Examples of some of the questions asked include, "I am good at my work," and "I can't decide what to do with my life," (see Appendix B for complete scale). Responses are rated on a 1 – 5 scale, with possible answers ranging from "strongly disagree" to "strongly agree." Of particular importance in the current study was the

identity subscale, which was the only subscale used in the present study (Cronbach's alpha = .86).

The Center for Epidemiological Studies Depression (CESD) Scale. The CESD scale measures depressive symptoms for non-clinical samples (Radloff, 1977). The CESD is designed specifically for adults within the general population (see Appendix C for complete measure). The scale is comprised of 20 questions addressing symptoms of depression within the last week, such as "during the past week, I felt that everything I did was an effort," with a scale response from 0 (does not apply at all) to 3 (applies quite well). This scale was reliable for the current study (Cronbach's alpha = .87).

Life Satisfaction Scale. The life satisfaction scale measures subjective well-being (Diener, Emmons, Larsen, & Griffin, 1985). The scale consists of 12 questions, such as, "in most ways, my life is close to ideal," with scale response options from 1 (strongly disagree) to 7 (strongly agree) (see Appendix D for complete measure) (Cronbach's alpha = .92).

Narrative Processes. Each participant responded to a written narrative prompt about a self-defining memory (see Appendix E for complete prompt). Self-defining memories theoretically lie at the heart of the self-understanding, and are critical memories for constructing identity to oneself and others (Singer & Blagov, 2004). I also solicited a memory narrative about a life challenge, but do not examine that here.

Narrative Coding

Narrative identity development is defined as the reflective process of creating a life story (Habermas & Bluck, 2000), and was captured through meaning-making**,** a coding system that has successfully used in past research with emerging adults (e.g., McLean & Pratt, 2006; McLean & Thorne, 2003; Pasupathi, McLean, & Weeks, 2009). The responses to

narrative prompts were evaluated for the degree of meaning. Meaning making was scored on a scale of zero to three, zero indicating no meaning, one indicating a lesson learned, two indicating vague meaning and three indicating insight, following previous research by McLean and Pratt (2006). No meaning was coded in narratives in which there is no explanation of how the event has impacted the self. Lessons were defined as a specific understanding about the self, but that only relates to quite similar events, and are usually behavioral (e.g., "I learned that I should not drive drunk."). Vague meaning was defined as more generalized than lessons (less emphasis on behavior), but not as explicit as insights (e.g., "I learned more about myself from that event."). Insight was defined as a broader understanding of the event and its general impact on many aspects of the self and life (e.g., "I learned to respect human life."). These codes are viewed as linear, in that they represent increasing depth of processing (see McLean & Pratt, 2006). A research assistant was trained in the use of the meaning making coding scheme, and then coded one-fifth of the narratives independently from the first author to determine reliability. This scale was reliable for the current study (*intraclass r* = .86).

Event Type. The responses to the narrative prompts were also categorized based on the actual type of event the participant discussed for each prompt. Following the classification employed by Thorne et al. (2004), event type was coded as: relationship events, mortality events, achievement events, leisure events, or autonomy events (see also McLean & Pratt, 2006). Relationship events are memories that primarily focus on relationship between an important individual in a person's life. Mortality events are those that focus on death of a person or pet. Achievement events are memories of the person reaching a goal or overcoming a perceived obstacle. Leisure events are memories that are focused primarily on

recreation, such as hobbies. Autonomy events are those that focus on the independence of the individual, or on self development. These event types are viewed as mutually exclusive. Thus, if more than one theme is present in the narratives, coders will select the dominant theme. A research assistant was trained in the use of the event coding scheme, and then coded one-fifth of the narratives independently from the first author to determine reliability. This scale was reliable for the current study (kappa = .84).

Procedure

Administration of survey. NC and FG college students were recruited via SONA Systems, an online research sign-up platform. The TC participants were recruited by attending psychology classes on campus to request participation, after which I gave a guest lecture to the class on the topic of my research.

All members of the community between the ages of 18-30 years old who had never been enrolled in any college courses were eligible for participation. The COM sample was collected through informational advertisements on Craigslist and Facebook, flyers placed around the community in both Whatcom and Skagit counties, and recruitment at the public library and Work Source. After successfully recruiting 10 participants via Craigslist, it was discovered that one participant had found a way to "fool" our system to participate in the study and receive reimbursement multiple times. We revoked the additional payments, and shut down further participant recruitment via Craigslist. Duplicated data were thrown out. A final COM sample of 30 participants were retained.

The survey was presented in both electronic and written format. NC and FG students completed the survey in a research lab on computers. TC completed a written version of the survey during a psychology class. COM completed either the electronic version of the survey

via a secure website, or the written format if they were recruited on site at the public library. The secure online website included informed consent information and electronic agreement, the two narrative prompts with space to type answers, and respond to the surveys and demographic information. After completion of the study, all participants were debriefed. COM who participated in person, NC, FG, and TC students were debriefed by the research assistant, and were given the opportunity to ask questions about the survey. All other COM participants were debriefed by written prompt electronically. Contact information of researchers was provided for all participants. NC and FG participants received course credit, and all other participants received $10 for their participation.

Results

Descriptives

Socioeconomic status (SES) was measured by participants' self reports of the highest educational attainment of both mother and father, the latter of which were moderately associated, $r = .48$, $p < .01$. Due to the modest association, and past research suggesting father's educational attainment may be a more accurate predictor of SES, we examined fathers' educational attainment as a measure of SES (Snibbe & Markus, 2005). The distribution of SES by group is shown in Table 1. Father educational attainment varied between groups, F (3, 194) = 17.39, p <.01. Post-hoc analyses of all pairwise comparisons were conducted using Bonferroni adjustment to hold the alpha level at .05 across all comparisons. Pairwise comparisons indicated that fathers' educational attainment was lowest for FG and the COM, TC students' fathers' educational attainment scores were in the middle, and NC students' fathers' had the highest educational attainment, as shown in Table 1.

The percentage of participants that were employed in each group is presented in Table 1, as well as the occupation classification for those who are employed. A one-way ANOVA indicated that there were group differences in employment status (F (3, 194) = 4.12, p =.007). Post hoc analysis using REGWQ indicated that NC students were more likely to be unemployed in comparison to TC students. No other group differences were observed. A comparison of occupation classification by group was not able to be conducted due to the low frequency of many cells. The pattern suggests that the majority of emerging adults are in sales and service, and this does not appear to differ by group.

Relationship status information was also collected from each participant, as shown in Table 1. Although it appears that NC students are less likely than all other groups to be in a committed relationship, the low rates of some cells prevented further analysis. Similarly, the data in Table 1 suggests that COM were more likely to have children compared to all other groups, but the low rates prevented statistical analysis.

Preliminary Analyses: Demographics

I first conducted preliminary analyses to determine if gender and age were associated with the main variables of interest. There were no gender differences within the subscales of ESPI or IDEA, nor measures of life satisfaction and depression, as shown in Table 2. However, gender differences were observed within the narrative measures. Females scored higher (M = 1.26, SD = 1.34) than males (M = .96, SD = 1.26) on meaning-making, F (1, 194) = 4.22, $p < .05$. Gender is controlled for in all subsequent analyses which include narrative measures.

The age distribution across groups was unequal, F (3, 194) = 5.96, p = .001. Post-hoc analysis utilizing REGWQ indicated that participants from the TC and COM samples were

older, as shown in Table 1. Age was also correlated with all subscales of the IDEA measure, which is expected. However, age was not correlated with any subscales of EPSI, narrative measures, satisfaction with life, or depression, as shown in Table 3. Because the age distribution was unequal across groups, age was controlled for in all subsequent analyses involving group comparisons.

Zero order correlations between all main variables of interest for each group are presented in Tables 3a and 3b. The EPSI identity scale was not correlated with the IDEA identity subscale. The two psychological adjustment scales were highly correlated in the total sample, $r = -.66$, $p < .01$. However, due to their conceptual distinctiveness, I kept these two assessments of psychological health separate.

Hypothesis One. *Identity processes are predicted to occur in higher frequencies in all college groups compared to COM.* In order to evaluate this hypothesis, I conducted multiple group comparisons to determine mean level differences in identity processes as measured by 1) EPSI identity subscale, and 2) the narrative measure of identity exploration - meaning making.

Table 4 presents means or percentages of all main variables for each group. An Analysis of Covariance (ANCOVA) was conducted comparing groups on each subscale, with age and gender entered as covariates. When ANCOVAs indicated statistically significant group differences, post-hoc comparisons were conducted using bonferroni adjustment to hold alpha at .05. As expected, the COM group scored lower than all other groups on the identity subscale, $F(3, 194) = 7.82$, $p < .001$. Also as expected, group differences were also found for meaning, $F(3,194) = 2.49$, $p = .06$. Post hoc comparisons indicated that COM reported the

lowest level of meaning compared to FG and the TC. These findings support the hypothesis that identity processes occur in higher frequencies for those attending college.

Hypothesis Two. *Within narratives about achievement, identity processes will be more prevalent in the NC compared to COM, with equivalent identity processing in narratives about relationships.* While the intent of the present study was to evaluate rates of identity processes for each group within different event themes, the base rates of achievement themed memories in the COM group were too low for meaningful analyses (n = 3). Figure 1 shows the percentage of each event type by group.

Hypothesis Three. *The depth of identity processes were predicted to correlate with psychological adjustment within all college samples. No hypothesis about the relationship between identity exploration and psychological adjustment in COM was proposed.* In order to address the final hypothesis, I first tested whether there were group differences in psychological adjustment. Second, the relationship between psychological adjustment and identity processes was examined for each group - first with narrative measures of identity processes and then with scale measures of identity achievement.

An ANCOVA (controlling for age and gender), found a significant difference in satisfaction with life, F (3, 194) = 12.47, $p < .001$. The COM group was lower than all other groups on satisfaction with life. An ANCOVA (controlling for age and gender), found a significant difference in depression, F (3, 194) = 8.59, $p < .001$. The COM group reported more depressive symptoms than all other groups.

There is no relationship between satisfaction with life and meaning (controlling for age and gender) for any group, as shown in Tables 3a and 3b. There is no relationship

between depressive symptoms and meaning (controlling for age and gender) for any group, as shown in Tables 3a and 3b.

However, there was a strong positive association between satisfaction with life and the identity subscale (controlling for age and gender) for each group, as shown in Tables 3a and 3b. This suggests that, above the effects of age and gender, higher rates of identity achievement are associated with higher levels of life satisfaction in all groups. There was a strong negative association identity achievement and depression (controlling for age and gender) for each group, as shown in Tables 3a and 3b. This suggests that, above the effects of age and gender, higher rates of identity achievement are associated with lower levels of depression.

In summary, these analyses suggest that overall, COM reported significantly lower satisfaction with life, and significantly higher rates of depressive symptoms. In the current sample, there was no relationship between either measure of psychological adjustment and narrative identity processing. However, for all groups, higher rates of identity achievement were associated with higher levels of satisfaction with life and lower rates of depressive symptoms.

Exploratory Analyses

As this is a relatively new group of emerging adults to be included in empirical research, additional exploratory analyses were conducted to further examine the degree to which each group met the dimensions of emerging adulthood via the IDEA subscales. IDEA subscales included identity exploration, exploration of possibilities, other focused, self focused, negativity and feeling in between. An Analysis of Covariance (ANCOVA) was conducted comparing groups on each subscale, where age and gender were entered as

covariates to assess group differences above age and gender. When ANCOVAs indicated statistically significant group differences, post hoc comparisons were conducted using bonferroni adjustment to hold alpha at .05. There were no group differences on the identity exploration and feeling in between subscales, $F(3, 194) = 2.11$, $p = .10$ and $F = 1.41$, $p = .37$, respectively. Group differences were observed on the subscale of exploration of possibilities, $F(3, 194) = 4.48$, $p = .005$; where NC students scored the highest, but were only significantly different from FG and COM. Group differences were also observed on the other-focused subscale, $F(3, 194) = 11.62$, $p < .001$. NC reported lower other-focus than TC and COM, and COM reported higher other-focus than FG. Group differences were also observed on the self-focused subscale, $F(3,194) = 2.89$, $p = .04$, where COM scored lower than NC. Group differences were also observed on the negativity subscale, $F(3,194) = 3.12$, $p = .03$. TC scored lower than COM, and there were no differences between NC, FG, and TC.

Discussion

The purpose of the present study was to expand research regarding identity development on emerging adults to include those both in and outside the college context. Specifically, the goal was to evaluate the level to which each group was engaged in identity processes from both narrative and status perspectives, as well as to evaluate the contexts through which identity processes are facilitated for each group. Finally, I examined the pattern of association between identity processes and psychological adjustment. Measures of identity processing suggest that non-college emerging adults engage in less identity exploration in comparison to emerging adults attending college. The contexts through which identity processes are best facilitated for each group could not be statistically evaluated due to sample size and low base rates of achievement narratives. Finally, findings suggest that

higher levels of identity achievement are associated with higher levels of satisfaction with life and lower levels of depression for all groups.

Hypothesis One. *Identity processes were predicted to occur in higher frequencies in the college groups compared to the non-college sample.* This hypothesis was supported with analyses using status and narrative measures, suggesting that non-college emerging adults may engage in less identity processing in comparison to emerging adults attending college. First, COM scored lower than all other groups on identity exploration and commitment. Group differences were also found for meaning-making, and post hoc comparisons indicated that COM reported the lowest level of meaning compared to FG and TC.

However, there were no group differences in the identity exploration subscale of the IDEA, and mean levels of this subscale suggest that all groups were engaging in identity exploration (all means were above 3). Although these were exploratory analyses, it is worth considering the apparent contradiction here, which may be explained by examining the level of complexity required for each of these three measures of identity. The IDEA scale is a broader measure of identity exploration and, in fact, was not designed to measure identity per se, but whether or not someone is in emerging adulthood. Thus, questions include broad, and even somewhat vague, statements. For example, the identity exploration subscale includes questions like, "is this a time in your life for planning for the future," and, "a time of learning to think for yourself."

In contrast, the EPSI identity exploration subscale assesses more complex and specific processes that require some form of commitment in various domains. For example, the EPSI identity subscale questions require commitment, "I like myself and I am proud of what I stand for," and, "a have a strong sense of what it means to be male/female." Finally,

meaning-making requires a complex understanding of the event and how it connects the past and present self. Thus, the distinction between these three measures is one of more complex processing and definitive commitment to identity related issues. Therefore, the results may be best understood as representing the idea that all groups are engaged in a similar level of identity exploration and commitment associated with the broad issues of emerging adulthood. However, attending college may be contributing to a deeper level of processing that is associated with higher levels of personal exploration of and commitment to various specific components of self.

Alternatively, these results may be indicative of the current experiences of those in an educational setting, experiences that may impact their ability, or prompt them, to participate in these more complex processes. For example, the narrative measures require self-expression via a written prompt, which may be facilitated by the critical thinking and writing tasks in which college students engage. Indeed, my original intention for including the EPSI was to protect against the possibility that those not in a college context would not have the linguistic skills to communicate explicit meaning. Of course, we cannot know the directionality of the relationship between college attendance and higher rates of narrative identity processes; it is also possible that those more likely to explore, or more interested in identity exploration, may be more likely to attend college.

It is also interesting to note that the FG and TC students reported the highest rates of meaning. For both of these groups, attending college can be viewed as a particularly important endeavor and accomplishment. For these groups, it may be likely that these individuals are drawn to attend college because of their interest in identity exploration. This interest may be even more so than their college attending counterparts, the NC students.

Additionally, identity threats are expected to elicit identity exploration, as seen in social identity studies (Aries & Seider, 2007; Jones, 2003; Nelson, Englar-Carlson, Tierney, & Hau, 2006; Schwartz, Donovan, & Guido-DiBrito, 2009). For FG and TC students, attending college can highlight social class differences, which may elicit identity exploration.

Hypothesis Two. *Within narratives about achievement, identity processes will be more prevalent in the NC compared to the COM, with equivalent identity processing in narratives about relationships.*

Due to the very low rate of achievement narratives in the community sample, this hypothesis could not be evaluated statistically. This may be reflective of the unique sample of community participants in this study, who were overwhelmingly underemployed (60%) compared to the population (13% is national unemployment rate in 2013 for 20-24 year olds, Bureau of Labor Statistics). Furthermore, the higher rates of depressive symptoms in the community sample may have contributed to an inability to recall achievement-related experiences, as individuals who are depressed are more likely to focus on negative experiences and less like to recall previous positive experiences (Lyubomirsky, Caldwell, & Nolen-Hoeksema, 1998). The content of achievement narratives themselves do not require positive experiences. However, previous studies have found that positive psychological adjustment is associated with meaning that is either positive or redemptive (Lindqvist, 2015). A reading of the community narratives indicated that when meaning was made, it was most often negative. Finally, this more vulnerable population simply may not have experienced many achievement-related events, particularly in educational settings.

Although the achievement themed memories could not be evaluated statistically, the FG group reported the highest rate of achievement-themed memories, with 35% of their

narratives containing achievement themes; of these, 82% contained some form of meaning-making. Many of these narratives revealed active identity processes for the FG students, many of whom specifically addressed academic achievement. For example, one FG student recorded the following narrative (meaning is underlined):

> *"My self-defining memory was when I spoke at my [community college] commencement. I was in front of friends, family, students, professors, and faculty. I remember being extremely nervous. I had never spoken in front of that large of a crowd before; in fact public speaking was one of my greatest fears. I took on this position because I wanted to share with others how the unexpected events in our lives can sometimes be the best things to ever happen to us. I definitely never anticipated going to a two year college to earn an A.A but I did and it was in those two years that I emerged as a leader. I remember this speech because of the reactions I received from others and the feelings I experiences afterward. I made the crowd laugh, cheer, and cry. Although I was nervous in the beginning, I was able to utilize the energy from the crowd and grow comfortable on stage. Till this day, I can remember that feeling. Being comfortable in front of thousands of people, sharing my story and attempting to relate to the experiences of my fellow classmates brought out a side of confidence and independence in me. When I come across other challenges in my life, I always think back to this moment and remind myself that I have the ability to conquer my fears if I want it badly enough."*

This narrative provides some evidence that for those who are first generation college students, academic achievement may be central to their identity development. Indeed, achievement themed narratives may be particularly salient as these individuals are actively pursuing a degree that is viewed as an accomplishment by the individual, for their family, and by the larger culture.

It should also be noted that for all groups, relationship themes were the most prevalent. This is something that unifies emerging adults in their emphasis on relationship exploration and commitment as an additional age-related task relevant during this developmental stage. I examined the narratives from all groups to see if the discussion of relationships was indeed similar. The FG and TC contained little to no narratives that focused on their relationship with a significant other. The predominant focus for these two groups

where about relationships with family or friends. This is particularly interesting, given that the FG group was most likely to be in a relationship compared to all other groups. For the COM and NC sample, the focus of significant other narratives centered on breakups in all narratives.

It is possible that for the FG and TC sample, the presence of a current stable romantic relationship may in part determine the *lack* of need to engage in exploration in this domain. As narrative exploration can be thought of as a mechanism to process and reframe current identity crises, those in a stable romantic relationship may turn to other types of relationships to explore and process, which these groups seem to be doing in the context of family and friends. As relationship development is an important task of emerging adulthood, it would be beneficial to explore further the content of relationship narratives specifically in future studies.

Hypothesis Three. *The depth of identity processes were predicted to correlate with psychological adjustment within NC, FC and TC. No hypothesis about the relationship between identity exploration and psychological adjustment in the COM group.*

The goal here was to evaluate if two complementary but opposite measures of psychological adjustment, satisfaction with life and depression, were associated with identity processes for each group. Findings suggest that higher levels of identity achievement were associated with higher levels of satisfaction with life, and lower levels of depression, across groups.

However, there was no relationship between narrative identity processing and satisfaction with life or depression. This is inconsistent with previous research evaluating the association with narrative identity processing in emerging adults (McLean & Pratt, 2006).

One possible explanation for the lack of association between narrative identity processing and measures of psychological adjustment may be understood in the differentiation of exploration and commitment to identity, which is one distinct difference in status and narrative measures. Narratives can capture and elicit active reflection and processing of past events as assessments of the exploration of a variety of potential identity commitments. Thus, the narrative measure of identity exploration may be capturing active identity processing, which may be more similar to an individual in moratorium. This stage of identity processing, occurring before commitment, may not be associated with positive outcomes as moratorium is a particularly unstable domain of development.

Ultimately, it may be a lack of statistical power contributing to the lack of relationship between meaning and psychological adjustment measures. Sample sizes for each group were small, and rates of meaning within each group (while consistent with narrative studies) are smaller still. This may prevent an accurate analysis of meaning and psychological adjustment.

Limitations and Future Directions

The first major limitation was the recruitment of the "non-college" sample. Indeed, defining and identifying this sample presented some obstacles. Although it was intrinsically understood that not all emerging adults attend college, it was difficult to define this group by what they were *not.* Due to the lack of association with an institution or organization, recruitment was difficult. Attempts to find participants through online methods such as social media (Facebook) and Craigslist presented fewer opportunities to verify that the individuals in fact met the criteria. Ultimately, the majority of the community sample was collected in person at the public library in Bellingham, and my observation was that this was a local

"hang out" for unemployed and/or homeless individuals in the community. Thus, the community sample may ultimately represent a narrow representation of those whom never attended college. Further, the restriction of absolutely no college attendance was important empirically as a starting point to separate and understand the relation between college attendance and identity development. However, this is a very narrow representation of the population. Indeed, a longitudinal study found that in 2012, 84% of emerging adults had some college education by age 27 (Lauff & Ingels, 2013). A more prototypical representation of emerging adulthood would involve the inclusion of those who have attended some college in the past, but have not completed a degree (and are not currently pursuing a degree).

Future research seeking to expand the inclusion of broader educational contexts would possibly benefit from seeking out particular job sites that hire high school graduates. Furthermore, the education contexts included in the present study do not represent all available education choices, leaving out community colleges, online institutions, and Ivy League schools. Inclusion of emerging adults in the military would also expand the understanding of identity development in emerging adulthood across a variety of contexts.

Another limitation of the current study is the self-selection of college attendance. A causal conclusion about the relationship or directionality of educational contexts and identity development cannot be made. Ideally, a longitudinal study that evaluates identity processes and college attendance and completion from adolescence through emerging adulthood would best address the relationship between identity processes and educational context across time.

Finally, although the current study suggests that identity achievement is associated with positive outcomes, it is limited in sample size. Larger samples would help to identify the

contexts through which healthy identity development is best facilitated for individuals of varying backgrounds.

Conclusion

Past research of emerging adults has yet to investigate the individual experiences and processes of identity development in emerging adults who are in the workforce or currently unemployed (Hendry & Kloep, 2007), predominately focusing on emerging adults attending universities. The current study expands the study of identity development in emerging adulthood to include varied educational contexts. The current study compared normative college students, first generation college students, technical college students and those who have never attended college, to evaluate potential group differences in identity exploration and the relationship between identity exploration and psychological adjustment. Emerging adults in college contexts engaged in more complex identity processing than those who never attended college. However, identity achievement was associated with positive outcomes in all groups. Further, it appears that the contexts under which identity processing occur may vary, though this remains a question for future research.

References

Archer, L., Hutchings, M., & Ross, A. (2003). *Higher education and social class: Issues of exclusion and inclusion.* New York, NY: RoutledgerFalmer.

Aries, E., & Seider, M. (2007). The role of social class in the formation of identity: A study of public and elite private college students. *The Journal of Social Psychology, 147*(2), 137-157.

Arnett, J. J. (1997). Conceptions of the transition to adulthood: Perspectives from adolscence through midlife. *Journal of Adult Development. 8,* 133-143. doi: 1068-0667/01/0400-0133

Arnett, J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development. 41,* 295-315.

Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist. 55*(5), 459-480. doi:10.1037//0003-066X.55.5.469

Arnett, J. (2006). Emerging adulthood in Europe: A response to Bynner. *Journal of Youth Studies, 9*(1), 111-123.

Arnett, J. (2007). Suffering, selfish, slackers? Myths and reality about emerging adults. *Journal of Youth and Adolescence, 36*(1), 23-29. doi:10.1007/s10964-006-9157-z

Beyers, W. & Seiffge-Krenke, I. (2010). Does identity precede intimacy? Testing Erikson's theory on romantic development in emerging adults of the 21st century. *Journal of Adolescent Research. 25*(3), 387-415. doi: 10.1177/0743558410361370

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49,* 71-75.

Dumas, T. M., Lawford, H., Tieu, T. T., & Pratt, M. W. (2009). Positive parenting in adolescence and its relation to low point narration and identity status in emerging adulthood: A longitudinal analysis. *Developmental Psychology, 45*, 1531-1544. doi:10.1037/a0017360

Erikson, E. (1968). *Identity: Youth and crisis*. New York, NY: WW Norton & Company.

Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin, 126*, 748-769. doi:10.1037//0033-2909.126.5.748

Hendry, L., & Kloep, M. (2007). Conceptualizing emerging adulthood: Inspecting the emperor's new clothes? *Child Development Perspectives, 1*(2), 74-79.

Jones, S. (2003). Complex subjectivities: Class, ethnicity, and race in women's narratives of upward mobility. *Journal of Social Issues, 59*, 803-820.

Kroger, J., Martinussen, M., & Marcia, J.E. (2010). Identity status change during adolescence and young adulthood: A meta-analysis. *Journal of Adolescence, 33*, 683-698.

Lauff, E., & Ingels, S.J. (2013). *Education longitudinal study of 2002 (ELS:2002): A first look at 2002 high school sophomores 10 years later* (NCES 2014-363). Retrieved October 23, 2015 from http://nces.ed.gov/pubsearch

Lindqvist, N. (2015). Meaning making and psychological distress in adolescence and emerging adulthood. Retrieved from http://hdl.handle.net/2077/39303

Lyubomirsky, S., Caldwell, N.D., & Nolen-Hoeksema, S. (1998). Effects of ruminative and distracting responses to depressed mood on retrieval of autobiographical memories. *Journal of Personality and Social Pyschology,75*(1), 166-177. doi: 10.1037/0022-3514.75.1.166

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551-558.

McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self.* New York: William Morrow.

McLean, K. C. (2005). Late adolescent identity development: Narrative meaning making and memory telling. *Developmental Psychology, 41*, 683-690. doi:10.1037/0012-1649..41.4.683

McLean, K. C. (2008a). The emergence of narrative identity. *Social and Personality Psychology Compass, 2*(4), 1685-1702.

McLean, K. C. (2008b). Stories of the young and the old: Personal continuity and narrative identity. *Developmental Psychology, 44*, 254-263. doi:10.1037/0012-1949.44.1.254

McLean, K. C., & Breen, A. (2009). Processes and content of narrative identity development in adolescence: Gender and well-being. *Developmental psychology*, *45*(3), 702-710.

McLean, K. C., Breen, A., & Fournier, M. (2010). Constructing the self in early, middle, and late adolescent boys: Narrative identity, individuation, and well being. *Journal of Research on Adolescence, 20*, 166-187. doi:10.1111/j.1532-7795.2009.00633.x

McLean, K. C., & Mansfield, C. D. (2011). To reason or not to reason: Is autobiographical reasoning always beneficial? *New Directions for Child and Adolescent Development, 2011(131)*, 85-97.

McLean, K. C., & Pratt, M. W. (2006). Life's little (and big) lessons: Identity statuses and meaning-making in the turning point narratives of emerging adults. *Developmental Psychology. 42*(4), 714-722. doi:10.1037/0012-1649.42.4.714

Mclean, K. C., Syed, M., Yoder, A., & Greenhoot, A.F. (2014). The role of domain content in understanding identity development processes. *Journal of Research on Adolscence, 1*, 1-16.

McLean, K. C. & Thorne, A. (2003). Late adolescents' self-defining memories about relationships. *Developmental psychology, 39*(4), 635.

Nelson, M.L., Englar-Carlson, M., Tierney, S.C., & Hau, J.M. (2006). Class jumping into academia: Multiple identities for conseling academics. *Journal of Counseling Psychology, 53*, 1-14.

Pals, J. (2006). Narrative identity processing of difficult life experiences: Pathways of personality development and positive self-transformation in adulthood. *Journal of Personality, 74*, 1079-1110. doi:10.1111/j.1467-6494.2006.00403.x

Pals-Lilgendahl, J. & McAdams, D. P. (2011). Constructing stories of self-growth: How individual differences in patterns of autobiographical reasoning relate to well-being in midlife. *Journal of Personality. 79*(2), 391-428. doi:10.1111/j.14676494.2010.00688.x

Park, C. L. (2010). Making sense of the meaning literature: An intergrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin, 136*, 257-301. doi:10.1037/a0018301

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 249-284.

Pascarella, E., & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco: Jossey-Bass.

Pasupathi, M., Mansour, E., & Brubaker, J. R. (2007). Developing a life story: Constructing relations between self and experience in autobiographical narratives. *Human Development, 50,* 85-110. doi:10.1111/j.1467-6494.2008.00557.x

Pasupathi, M., McLean, K. C., & Weeks, T. (2009). To tell or not tell: Disclosure and the narrative self. *Journal of Personality, 77,* 89-123. doi:10.1111/j.1467-6494.2008.00539.x

Plug, W., Zeijl, E., du Bois-Reymond, M. (2003). Young people's perceptions on youth and adulthood. A longitudinal study from the Netherlands. *Journal of Youth Studies. 6*(2), 127-144. doi:10.1080/1367626032000110273

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385-401.

Reifman, A., Arnett, J.J., & Colwell, M.J. (2007). Emerging adulthood: Theory, assessment, and application. *Journal of Youth Development, 2*(1), 1-2.

Rosenthal, D. A., Gurney, R. M., & Moore, S. M. (1981). From trust to intimacy: A new inventory for examining Erikson's stages of psychosocial development. *Journal of Youth and Adolescence. 10,* 525-537.

Singer, J.A., & Blagov, P.S. (in press a). The integrative function of narrative processing: Autobiographical memory, self-defining memories and the life story of identity. In D.R. Beike, J. M. Lampinen, & D. A. Behrend (Eds.), The self and memory. New York: The Psychology Press.

Snibbe, A.C., & Markus, H.R. (2005). You can't always get what you want: Educational attainment, agency, and choice. *Journal of Personality and Social Psychology. 88,* 708-720. doi: 10.1037/0022-3514.88.4.703

Schwartz, S.J. (2007). The structure of identity consolidation: Multiple correlated contructs or one superordinate contruct? *Identity: An Interational Journal of Theory and Research. 7*(1), 27-49.

Schwartz, J.L., Donovan, J., & Guido-DiBrito, F. (2009). Stores of social class: Self-identified Mexican male college students crack the silence. *Journal of College Student Development, 50,* 50-66.

Syed, M. & Azmitia, M. (2010). Narrative and ethnic identity exploration: a longitudinal account of emerging adults' ethnicity-related experiences. *Developmental Psychology. 46*, 208-219. doi:10.1037/a0017825

Thorne, A., McLean, K., & Lawrence, A. (2004). When remembering is not enough: Reflecting on self defining memories in late adolescence. *Journal of Personality, 72*, 513-542.

Table 1

Summary of Demographic Information for Groups

	NC	FG	TC	COM
N	71	49	51	30
Age	20.94 (2.27)	19.86 (2.21)	21.86 (3.75)	22.27 (3.50)
Female (% of sample)	62.00%	73.50%	66.60%	60.00%
Ethnicity				
European American	71.40%	69.40%	78.40%	64.30%
Asian American	7.10%	6.10%	5.90%	0.00%
African American	4.30%	2.00%	0.00%	0.00%
Mexican American	1.40%	8.20%	2.00%	3.60%
Native American	0.00%	0.00%	3.60%	3.60%
Mixed/Other	15.70%	14.20%	10.10%	28.60%
Children				
None	95.80%	95.90%	80.40%	66.70%
1 or more	4.20%	4.10%	19.60%	33.30%
Relationship Status				
Single	49.30%	34.70%	41.20%	43.30%
Casually Dating/Open Relationship	14.10%	10.20%	0.00%	3.30%
Committed/Domestic Relationship	36.60%	46.90%	39.20%	30.00%
Engaged/Married/Civil Union	0.00%	8.20%	19.60%	14.90%
Occupation				
Employed	35.20%	49.00%	66.00%	40.00%
Laborer	4.20%	8.70%	9.80%	28.60%
Sales	62.50%	60.90%	36.60%	42.90%
Service	20.80%	26.10%	34.40%	21.40%
administrative support	8.30%	4.30%	0.00%	0.00%
technical	0.00%	0.00%	24.40%	0.00%
managerial/administrative	4.20%	0.00%	4.90%	7.10%
Father Educational Attainment				
no high school	-	2.00%	2.86%	-
Some high school	4.17%	14.00%	15.71%	14.63%
High school diploma	1.39%	40.00%	18.57%	29.27%
GED	-	8.00%	5.71%	2.44%
some college	22.22%	14.00%	11.43%	12.20%
certification program	2.78%	8.00%	7.14%	7.32%
Associates Degree	5.56%	4.00%	2.86%	-
Bachelor's Degree	29.17%	4.00%	17.14%	2.40%
Master's Degree	19.44%	-	7.14%	12.20%
Doctoral Degree	5.56%	-	4.29%	2.44%
Professional Degree	8.33%	-	1.43%	-
Other/unknown	1.39%	-	-	17.07%

Note: Mean (SD) reported unless indicated as percentage.

Table 2

Gender Differences for Main Variables

	Female M (SD)	Male M (SD)	*F*	*p*
Age	21.03 (3.15)	21.31 (2.67)	0.414	0.521
SES	4.94 (2.59)	5.27 (2.74)	0.659	0.418
Meaning	1.36 (1.34)	.96 (1.26)	4.223	0.041
EPSI identity subscale	3.66 (.76)	3.61 (.73)	0.132	0.717
IDEA identity subscale	3.39 (.43)	3.33 (.42)	0.969	0.326
Satisfaction with Life	4.90 (1.21)	4.70 (1.12)	0.254	0.614
Depression	38.47 (10.03)	37.48 (10.48)	0.670	0.414

Table 3a.

Correlations of Main Variables By Group for NC and FG

	1	2	3	4	5
1. Age					
2. Meaning	-.127 (.066)				
3. IDEA identity focus	-.289* (-.526**)	0.141 (.148)			
4. EPSI identity	0.136 (-.121)	0.099 (.041)	-.261* (.099)		
5. Depression	0.09 (.01)	-.18 (-.05)	-.01 (-.02)	-.51** (-.74**)	
6. Life Satisfaction	-0.13 (-.26)	0.17 (.15)	-.01 (.13)	.640** (.69**)	-.620** (-.67**)

Note: The values are presented as NC (FG). * = p < .05, ** = p < .01

Table 3b.

Correlations of Main Variables By Group for TC and COM

	1	2	3	4	5
1. Age					
2. Meaning	0.01 (-.052)				
3. IDEA identity focus	-.327* (-.146)	-0.129 (.344)			
4. EPSI identity	.278* (.132)	0.143 (.131)	-.183 (.203)		
5. Depression	-.11 (-.14)	-.15 (.02)	0.24 (.11)	-.61** (-.39**)	
6. Life Satisfaction	0.12 (-.19)	0.24 (.12)	0.00 (.06)	.68** (.64**)	-.53** (-.53**)

Note: The values are presented as TC (COM). * = p < .05, ** = p < .01

Table 4

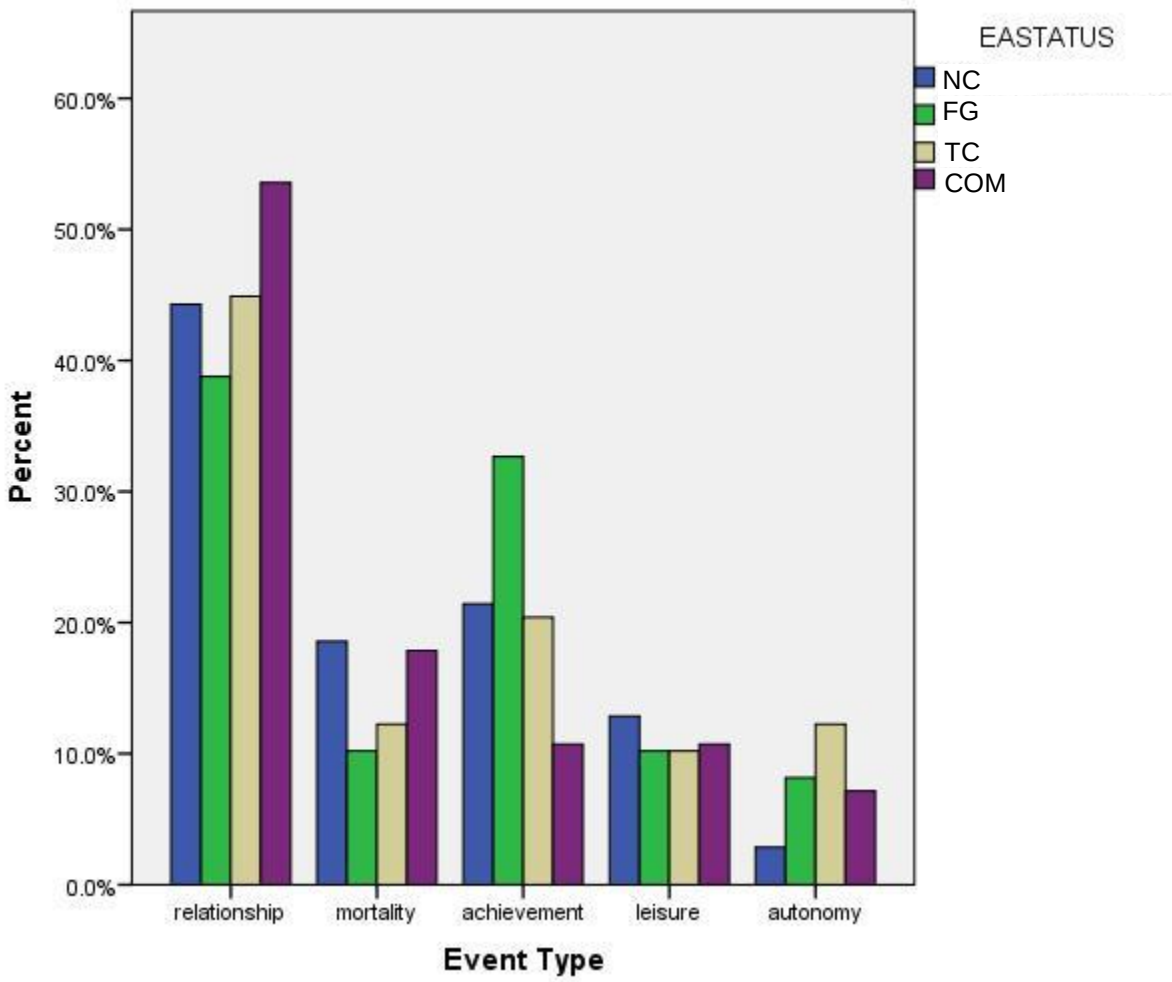
Summary of Main Variables by Group

	NC M (SD)/%	FG M (SD)/%	TC M (SD)/%	COM M (SD)/%	*p*
Meaning	1.09 (1.26)	1.51 (1.29)	1.40 (1.44)	.69 (1.14)	0.03
Event Type					0.56
Relationship	44.30%	38.80%	44.90%	53.60%	
Mortality	18.60%	10.20%	12.20%	17.90%	
Achievement	21.40%	32.70%	20.40%	10.70%	
Leisure	12.90%	10.20%	10.20%	10.70%	
Autonomy	2.90%	8.20%	12.20%	7.10%	
IDEA					
identity exploration	3.54 (.42)	3.54 (.40)	3.32 (.54)	3.48 (.52)	0.04
exploring possibilities	3.62 (.41)	3.44 (.49)	3.41 (.52)	3.22 (.63)	0.002
other focused	2.28 (.68)	2.53 (.66)	2.90 (.73)	3.13 (.71)	< .001
self focused	3.53 (.35)	3.44 (.39)	3.36 (.47)	3.21 (.58)	0.01
in between	3.23 (.78)	3.22 (.77)	3.06 (.87)	3.24 (.73)	0.59
total	3.12 (.27)	3.08 (.26)	2.99 (.34)	3.12 (.31)	0.09
EPSI					
identity	3.71 (.76)	3.72 (.64)	3.81 (.76)	3.10 (.63)	< .001
Psychological Adjustment					
Satisfaction with Life	5.04 (1.01)	5.31 (.93)	4.95 (1.18)	3.70 (1.29)	<.001
Depression	36.59 (7.77)	36.30 (8.97)	35.66 (9.21)	46.09 (12.70)	<.001

Note: IDEA = identity development in emerging adulthood scale. EPSI = Erikson Pyscho-Social Inventory. Mean (SD) reported unless indicated as percentage.

Figure 1

Event type frequency for self-defining memory



Appendix A

Views of Life Survey

- First, please think about this time in your life. By "time in your life," we are referring to the present time, plus the last few years that have gone by, and the next few years to come, as you see them. In short, you should think about a roughly five-year period, with the present time right in the middle.

- For each phrase shown below, please place a check mark in one of the columns to indicate the degree to which you agree or disagree that the phrase describes this time in your life. For example, if you "Somewhat Agree" that this is a "time of exploration," then on the same line as the phrase, you would put a check mark in the column headed by "Somewhat Agree" (3).

- Be sure to put only one check mark per line.

Is this period of your life a…	Strongly Disagree (1)	Somewhat Disagree (2)	Somewhat Agree (3)	Strongly Agree (4)
1. time of many possibilities?				
2. time of exploration?				
3. time of confusion?				
4. time of experimentation?				
5. time of personal freedom?				
6. time of feeling restricted?				
7. time of responsibility for yourself?				
8. time of feeling stressed out?				
9. time of instability?				
10. time of optimism?				
11. time of high pressure?				
12. time of finding out who you are?				
13. time of settling down?				
14. time of responsibility for others?				
15. time of independence?				
16. time of open choices?				
17. time of unpredictability?				
18. time of commitments to others?				
19. time of self-sufficiency?				
20. time of many worries?				
21. time of trying out new things?				
22. time of focusing on yourself?				
23. time of separating from parents?				
24. time of defining yourself?				
25. time of planning for the future?				
26. time of seeking a sense of meaning?				
27. time of deciding on your own beliefs and values?				

28. time of learning to think for yourself?				
29. time of feeling adult in some ways but not others?				
30. time of gradually becoming an adult?				
31. time of being not sure whether you have reached full adulthood?				

Subscale	***Items to Average***
Identity Exploration	**12, 23, 24, 25, 26, 27, 28**
Experimentation/Possibilities	**1, 2, 4, 16, 21**
Negativity/Instability	**3, 6, 8, 9, 11, 17, 20**
Other-Focused	**13, 14, 18**
Self-Focused	**5, 7, 10, 15, 19, 22**
Feeling "In-Between"	**29, 30, 31**

Appendix B

Erikson's Psychosocial Stage Inventory (EPSI)

Appendix continued.

Item number	Subscale
	Autonomy
1.	I am able to take things as they come
2.	I can't make sense of my life"
5.	I can't make up my own mind about things"
8.	I'm never going to get on in this world"
13.	I know when to please myself and when to please others
28.	I really believe in myself
39.	I am ashamed of myself"
54.	I like to make my own choices
55.	I don't feel confident of my judgment"
62.	I can stand on my own two feet
63.	I find it hard to make up my mind"
65.	I like my freedom and don't want to be tied down
	Initiative
7.	I am able to be first with new ideas
16.	I don't seem to have the ability that most others have got"
21.	I rely on other people to give me ideas"
23.	I think I must be basically bad"
26.	I feel guilty about many things"
34.	I'm an energetic person who does lots of things
46.	I can stop myself doing things I shouldn't be doing
50.	I find myself denying things even though they are true"
57.	I cope very well
61.	I'm a follower rather than a leader"
66.	I like new adventures
69.	I like finding out about new things or places
	Industry
15.	I don't seem to be able to achieve my ambitions"
22.	I don't enjoy working"
25.	I'm a hard worker
32.	I feel I am a useful person to have around
35.	I'm trying hard to achieve my goals
40.	I'm good at my work
45.	I can't stand lazy people
52.	I waste a lot of my time messing about"
58.	I'm not much good at things that need brains or skill"
60.	I stick with things until they're finished
68.	I don't get things finished"
70.	I don't get much done"
	Identity
6.	I change my opinion of myself a lot"
10.	I've got a clear idea of what I want to be
11.	I feel mixed up"
14.	The important things in life are clear to me
17.	I've got it together
18.	I know what kind of person I am
29.	I can't decide what I want to do with my life"
37.	I have a strong sense of what it means to be female/male

Appendix continued.

Item number	Subscale
43.	I like myself and am proud of what I stand for
44.	I don't really know what I'm on about[a]
49.	I find I have to keep up a front when I'm with people[a]
51.	I don't really feel involved[a]
	Intimacy
4.	I get embarrassed when someone begins to tell me personal things[a]
9.	I'm ready to get involved with a special person
27.	I'm warm and friendly
30.	It's important to me to be completely open with my friends
33.	I keep what I really think and feel to myself[a]
41.	I think it's crazy to get too involved with people[a]
48.	I care deeply for others
56.	I'm basically a loner[a]
59.	I have a close physical and emotional relationship with another person
67.	I prefer not to show too much of myself to others[a]
71.	Being alone with other people makes me feel uncomfortable[a]
72.	I find it easy to make close friends

[a]Reversed items.

Appendix C

Depression Scale

Using the 0-4 scale provided below, please indicate your level of agreement or disagreement for each of the statements on the next two pages. Write the value that corresponds to your level of agreement or disagreement in the space provided to the left of each statement.

Applies quite well = 3
Applies somewhat = 2
Does not apply particularly well = 1
Does not apply at all = 0

During the past week, I was bothered by things that usually don't bother me.
During the past week, I did not feel like eating; my appetite was poor.
During the past week, I felt that I could not shake off the blues even with help from my family or friends.
During the past week, I felt that I was just as good as other people.
During the past week, I had trouble keeping my mind on what I was doing.
During the past week, I felt depressed.
During the past week, I felt that everything I did was an effort.
During the past week, I felt hopeful about the future.
During the past week, I thought my life had been a failure.
During the past week, I felt fearful.
During the past week, my sleep was restless.
During the past week, I was happy.
During the past week, I talked less than usual.
During the past week, I felt lonely.
During the past week, people were unfriendly.
During the past week, I enjoyed life.
During the past week, during the past week, I had crying spells.
During the past week, I felt sad.
During the past week, I felt that people disliked me.
During the past week, I could not get "going".

Appendix D

Life Satisfaction Scale

Using the 1-7 scale provided below, please indicate your level of agreement or disagreement for each of the statements on the next two pages. Write the value that corresponds to your level of agreement or disagreement in the space provided to the left of each statement.

1=Strongly Disagree
2=Disagree
3=Slightly Disagree
4=Neither
5=Slightly Agree
6=Agree
7=Strongly Agree

In most ways my life is close to my ideal.
I am dissatisfied with my life
The conditions of my life are excellent.
I am satisfied with my life.
If I could life my life over, I would try to make many changes.
I like my life.
My life is completely different from my ideal.
So far I have gotten the important things I want in my life.
I dislike my life
So far my life has not met my expectations.
If I could live my life over, I would change almost nothing.
The conditions of my life are terrible.

Appendix E

Demographic Survey
Age:_____

Gender:
- Male
- Female

Ethnicity
- White
- Black
- Hispanic/Latino
- Asian
- Native American
- Other_____

Religion:
- None
- Atheist/Agnostic
- Jewish
- Buddhist
- Non-Catholic Christian (Lutheran, Baptist, Presbysterian)
- Catholic
- Muslim
- Seikh
- Hindu
- Other _____

Father's Education (check all that apply):
- Some high school
- High School Diploma
- GED
- Some College
- Certification Program
- Associates Degree
- Bachelors Degree
- Masters Degree
- Doctoral Degree
- Other _____

Mother's Education (check all that apply):
- Some high school
- High School Diploma

- GED
- Some College
- Certification Program
- Associates Degree
- Bachelors Degree
- Masters Degree
- Doctoral Degree
- Other _____

Your Education:

- Some high school
- High School Diploma
- GED
- Some College
- Certification Program
- Associates Degree
- Bachelors Degree
- Other _____

Are you currently a student?

- Yes
- No

Are you currently employed?

- Yes
- No

If yes, how many jobs do you have? _____

How many total hours per week do you work? _____

Do you receive any medical benefits through your job?

- Yes
- No

What is your current occupation? _____

Your Income (in the last year) (if you share finances with a partner, record your total household income):

- $0-$10,000 per year
- $11,000-$15,000 per year
- $16,000-$20,000 per year
- $21,000-$30,000 per year
- $30,000-$40,000 per year
- $50,000 and up per year

Cohabitation Status-who do you live with currently? Check all that apply:

- With parents
- With roommates
- With romantic partner
- On campus
- Off campus
- Alone

Do you have children? _____
If yes, how many? _____

Relationship Status (check all that apply):

- Single
- In a committed relationship
- Engaged
- Married
- Divorced
- Other _____

Appendix F

Narrative Prompt: Self-Defining Memory

In looking back on one's life, it is often possible to identify certain key self-defining memories. A self-defining memory has the following attributes: it is at least one year old. It is a memory from your life that you remembered very clearly and that still feels important to you even as you think about it. It is a memory about an important enduring theme, issue, or conflict from your life. It is a memory that helps explain who you are as an individual and might be the memory you would tell someone else if you wanted that person to understand you in a profound way. It is a memory linked to other similar memories that share the same theme or concern. It may be a memory that is positive or negative, or both, in how it makes you feel. The only important aspect is that it leads to strong feelings. It is a familiar memory that you have thought about many times. Describe the your memory of the event, including where you were, whom you were with, what happened, your reaction and the reaction of anyone else involved in the event. Please date each memory (month/day/year) as accurately as you can, even if you must estimate. If the memory extended over a period of time, please report the middle of the period.